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## Florida West Coast Section (FWCS)

## The SunCoast SIGNAL Newsletter

The Institute of Electrical and Electronics Engineers, Inc.

This Newsletter is Now  
**DISTRIBUTED  
ELECTRONICALLY**

**There is NO Print Edition**  
Also, it can be downloaded  
from the FWCS website:  
<https://r3.ieee.org/fwc/newletter-archive/>

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Next ExCom Meeting  
Tuesday, June 3, 2025  
Google Meet  
Register with vTools

<https://events.vtools.ieee.org/m/485582>

### PE Corner

#### Art Nordlinger, PE, Life Senior Member Mentoring

Spring college graduation brings a fresh batch of engineers into the workforce. You may have one or more working for you, or beside you. The engineering education that students receive usually prepares them technically for the challenges to come as an engineering professional. However, many do not realize the full extent of what is involved in the practice of engineering. They often express concerns about being in a decision-making position for which they are not prepared due to a lack of practical experience. Those of us who have been around the block a time or two can help provide confidence to younger engineers through mentoring.

Many engineers would be happy to mentor a new engineer if asked, but don't actively seek out the opportunity. Consider looking for a chance to mentor those young engineers in your company who are recent graduates. They will appreciate it, and it will be quite rewarding for both you as a mentor and your company through increased productivity.

An experienced engineer, when faced with the challenge of not having previously done the engineering task at hand, can often fall back on past experiences to extrapolate and arrive at the correct answer. However, many young engineers do not have the same level of practical experience needed to make good engineering decisions.

*Continued on Page 2*

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**WEB MASTER:** TJ Ross, a.j.ross@ieee.org**WEB PAGE:** <https://r3.ieee.org/fwc/>**PE Corner - Cont'd from Page 1**

Many of us have experienced situations as a young engineer right out of college, where we had learned the theory of various engineering principles but weren't sure how to best apply what we had learned to solve the problem. Rather than figure it out on our own, many of us had the opportunity to consult with engineers we worked with who took the time to explain the best and most efficient solutions, both technically and administratively, to complete various aspects of engineering projects. This is the type of mentoring where a more experienced engineer can have a positive influence on the career of a younger engineer.

Supervisors of younger licensed engineers should also take care to not place them in a position of making engineering decisions they are not qualified to make. This could lead not only to a problem with the project but could possibly lead to a disciplinary case against the licensed supervising engineer and the licensed younger engineer. Additionally, the mentoring you do today could help eliminate some bad habits the younger engineer might otherwise carry with them for the rest of their career.

Last, encourage new engineers to take the Fundamentals of Engineering (FE) exam if they haven't already done so. With their engineering education fresh in their minds, they should be able to pass the exam with only a modest amount of preparation. Those who find that a PE license is desirable or necessary a few years later in their career often face a steep learning curve to re-learn information necessary to pass the FE.

If you aren't already doing so, I encourage those of you who are the more experienced engineers to seriously consider being a mentor to a younger engineer. In the end, I believe you will end up with better projects and you will have an employee who will be an engineer ready to lead our profession in the future

Whether you are a PE looking to attain required CEHs, or an engineer looking to learn something new or keep current with the latest trends in the profession, IEEE has seminars that will meet your needs.



## Using AI For Job Hunting

**Date:** Wednesday, June 18  
**Time:** 6:00 pm - 7:00 pm  
**Where:** Virtual  
**Cost:** No Cost  
**Speaker:** Dr. Jim Anderson Chair of the IEEE Professional Activities Committee for Engineers (PACE)  
**Register:** <https://events.vtools.ieee.org/m/484595>  
**Contact:** Dr. Jim Anderson - [jim.anderson@ieee.org](mailto:jim.anderson@ieee.org)

The arrival of AI has taken all of us by surprise. Almost overnight it seems to have shown up in just about everything that we do. In fact, Meta has just announced that they have worked AI into their popular Facebook and Instagram tools for everyday users. The key to making AI work for you is to understand what AI tools have become available to you – and how to use them!

One of the most demanding jobs that engineers are currently facing is finding their next job. No matter if you are just first starting out, if you job has gone away, or if you are just looking for a better job than the one that you currently have, finding your next job can be a real challenge.

We all have a resume. However, how did that resume get put together? If you are like most of us, once upon a time you looked up what resumes were supposed to look like, created one that seemed to do the trick and then you've been updating it ever since. Bad news – that type of resume is not going to get you the job that you are looking for these days.

As long as we are talking about resumes, should we also talk about your LinkedIn profile? During your lifetime your resume will be seen by maybe 40-50 people, but your LinkedIn profile will probably be seen by 100's if not 1000's of people. Seems like it should be working for you also.

If we want to get these documents to work for us, it seems like now would be the right time to see what AI tools are available and how they can help us to craft documents that will let us shine and will show the world that we are the ones that they want to hire when a job opens up!

Join us on Wednesday, June 18<sup>th</sup> for this IEEE FWCS PACE presentation and we'll explore what tools to use, how to build a resume and a LinkedIn profile that will make things happen for you!



## Systems Engineering Models

**Date:** Tuesday, June 24, 2025  
**Time:** 6:00 pm - 7:30 pm (EST/EDT)  
**Where:** Virtual  
**Cost:** Lecture - No Cost  
**CEH Credits:** 1  
**CEH Certificate:** \$20  
**Speaker:** Michael Mayor, MSE, PE, Chair Joint Chapter AESS/IMS  
**RSVP:** Online at: <https://events.vtools.ieee.org/m/481265>  
**Questions:** Michael Mayor, [michael.mayor@ieee.org](mailto:michael.mayor@ieee.org)

**Abstract:** This presentation answers the question: What is an Engineering Model? I will review a brief history of models and address the Purpose and Utility of Engineering Models. Subsequently, I will address Engineering Block Diagrams, Modeling Systems and Mathematical Modeling. I will present an example using Geolocation Systems addressing the mathematical models applied for Time Difference of Arrival (TDOA) and Frequency Difference of Arrival (FDOA) parameters, as well as the Cross Ambiguity Function. I will present the effects of Sensitivity and Dynamic Range on Geolocation.

**Michael Mayor, MSE, PE.** is an Independent Consultant providing Systems Engineering Services to the Aerospace and Defense Industries in the areas of Secure Information Systems and Secure Communication Networks.

Formerly, he was Vice President / Chief Scientist, Advanced Technology Research, in the Aerospace / Communications Division of ITT Defense Electronics. He conducted Research of Advanced Systems Engineering and Technologies for Secure Communications, Signals Intelligence and Emitter Geolocation Systems for Terrestrial, Airborne and Spaceborne Systems and their Subsystems. These

included: Radio Frequency Transceivers, Software Defined and Cognitive Radio Systems, Digital Receivers and Digital Signal Processing algorithms.

Previously, as Technical Director and Principal Engineer he conducted the Design, Development, Field Testing applying Instrumentation and Measurement Technology and, in some instances, Deployment Support, of Secure Communications, Signals Intelligence and Emitter Geolocation Systems.

He authored six patents in Spread Spectrum Communications and Digital Instrumentation. He received the ITT Defense & Electronics Engineered for Life Award, for his technical contributions in Communications, Geolocation and Microelectronics.

He is an IEEE Life Senior Member and holds a Master of Science in Engineering (MSE) from the School of Engineering and Applied Sciences at the University of Pennsylvania.

He is a Licensed Professional Engineer (PE) in the State of VA, and a member of the National Society of Professional Engineers (NSPE).



## Symmetrical Components and Fault Calculations

**Date:** Friday, July 25, 2025

**Time:** 10:00AM – 3:00 PM (EDT)

**Speaker:** Thomas H. Blair, Senior Engineering Fellow, Tampa Electric

**Location:** Seminole Electric Cooperative, Inc. – 16313 N Dale Mabry Hwy Tampa, FL 33618

**Cost:** \$100 Members, \$200 Non-Members, \$20 Students

**CEH Credits:** Four (4) Continuing Education Hours will be awarded.

Be sure to enter your name and PE number on the signup website as it appears on your license.

**RSVP:** Online at: <https://events.vtools.ieee.org/m/483524>

**Questions:** Tom Blair - [tom\\_blair@ieee.org](mailto:tom_blair@ieee.org), Kayla Allemang – [kallemang@ieee.org](mailto:kallemang@ieee.org)

### The seminar will include:

- ◆ Review of Basics
  - o Phasors, Per-Unit
- ◆ Symmetrical Components
  - o Physical Example of Vector Components
  - o Application of Symmetrical Components to Three-Phase Power Systems
  - o Electrical Characteristics of the Sequence Currents
  - o The Delta-Wye Transformer
- ◆ Sequence Networks
  - o Thevenin Reduction of the Sequence Networks
- ◆ Fault Calculations
  - o Momentary versus Interrupting
  - o Short-Circuit Faults

*The level of difficulty of this course is Intermediate.*

### Speaker:

**Tom Blair** is a Senior Engineering Fellow with Tampa Electric. He performs electrical system analysis and uses the results to specify electrical equipment ratings, protective relay settings, and electrical system arrangement.

Tom has also been adjunct professor in the past at the University of South Florida and has presented courses at the university on topics such as Electrical Machines and Drives, Energy Production Systems Engineering, and the FE and PE (power) exam preparation course at USF.

Mr. Blair is a Senior Member of IEEE.





## **Calling all Power Industry & Computer Science Professionals USF Interview Skills Workshop**

**Date: Friday September 12, 2025**

**Time: 9:00 am – 3:00 pm**

**Location: USF Marshal Student Center (MSC) – Room TBD**

**IEEE Florida West Coast Section (FWCS) Power & Energy Society/Industry Applications Society (PES/IAS)** is partnering with the USF PES Student Chapter to host an Interview Skills Workshop. This event is designed to help engineering students develop strong interview skills through expert insights, interactive presentations, and mock interviews.

**We are seeking industry volunteers** to support this event in the following roles:

**Presenters:** Deliver a brief session (30 minutes) on interview strategies, such as behavioral questions, resume tips, STAR Method, technical question preparation, real-life experience, nonverbal communication, virtual interview best practices, or post-interview follow-ups – looking for multiple presenters on different topics

**Mock Interviewers (45 minutes, per interview):** Conduct one-on-one mock interviews, providing students with valuable feedback – preferably hiring managers

This is a great opportunity to mentor the next generation of engineers, network with peers, and contribute to workforce development. If you are interested in participating, please contact one of the following IEEE FWCS PES/IAS Members by **Tuesday July 1, 2025**:

**Kayla Allemang, [kallemang@ieee.org](mailto:kallemang@ieee.org)**

**Ron Ambrosio, [ron.ambrosio@ieee.org](mailto:ron.ambrosio@ieee.org)**

**Regan Sink, [rjsink@ieee.org](mailto:rjsink@ieee.org)**

**Sohila Teama, [sohila\\_teama@selinc.com](mailto:sohila_teama@selinc.com)**

**Thanh Le, [TNLe@tecoenergy.com](mailto:TNLe@tecoenergy.com)**

**Thank you for supporting future engineering professionals,**

**we appreciate your involvement!**

Year 2025			
Florida West Coast Section - Upcoming Events Summary			
Date / Location/Time	Organization Contact email	Description Location or Website	A
Thursday, June 5	FWCS	Interview Skills Workshop Planning Meeting	V
12:00 pm - 1:00 pm	PES/IAS	<a href="https://events.vtools.ieee.org/m/483651">https://events.vtools.ieee.org/m/483651</a>	
	Kayla Allemang		
	<a href="mailto:kallemang@ieee.org">kallemang@ieee.org</a>		
Thursday, June 5	FWCS	Monthly Meeting	V
6:30 pm - 7:30 pm	CS	<a href="https://events.vtools.ieee.org/m/485339">https://events.vtools.ieee.org/m/485339</a>	
	Antra Melhotra		
	<a href="mailto:antra.malhotra@ieee.org">antra.malhotra@ieee.org</a>		
Tuesday, June 24	FWCS	System Engineering Models	V
6:00 pm - 7:30 pm	AESS/IMS	<a href="https://events.vtools.ieee.org/m/481265">https://events.vtools.ieee.org/m/481265</a>	
	Michael Mayor, MSE, PE		
	<a href="mailto:michael.mayor@ieee.org">michael.mayor@ieee.org</a>		
Wednesday, June 18	FWCS	Using AI for Job Hunting	V
6:00 pm - 7:00 pm	PACE	<a href="https://events.vtools.ieee.org/m/484595">https://events.vtools.ieee.org/m/484595</a>	
	Dr. Jim Anderson		
	<a href="mailto:jim.anderson@ieee.org">jim.anderson@ieee.org</a>		
Saturday, June 28	FWCS	ExCom	P
7:30 am - 8:30 am	PES/IAS	215 N Dale Mabry Hwy, Tampa, FL 33609	
	Kayla Allemang		
	<a href="mailto:kallemang@ieee.org">kallemang@ieee.org</a>		
May 26-30	IEEE Biometrics	IEEE 19th International Conference on	P
Tampa / Clearwater	Computer Society	Automatic Face and Gesture Recognition	
	Shaun Canavan	<a href="https://ieee-">https://ieee-</a>	
	<a href="mailto:scanavan@usf.edu">scanavan@usf.edu</a>		
*Attendance: V: Virtual --- P: In Person --- V & P: Virtual and In Person			

## SunCoast Signal Advertising Rates

Size	1 Month		6 Months		12 Months	
	Member	Non-Member	Member	Non-Member	Member	Non-Member
Business Cards	\$25	\$35	\$120	\$150	\$210	\$252
1/4 Page	\$40	\$52	\$190	\$380	\$335	\$402
1/2 Page	\$75	\$98	\$360	\$450	\$630	\$756
3/4 Page	\$110	\$143	\$530	\$663	\$925	\$1,110
Full Page	\$140	\$182	\$670	\$838	\$1,175	\$1,410
Insert / Sheet	\$200	\$260	\$800	\$1,000	\$2,000	\$2,400



*IEEE Florida West  
Coast Section  
(FWCS)  
Tampa, Florida*

**IEEE FWCS  
P. O. Box 176  
Land O' Lakes,  
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**June 2025 - Calendar of Events** (For more information see "Inside the SunCoast Signal" → Page 1)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
		*FWCS ExCom →Page 1		*FWCS CS Monthly Meeting →Page 7		
8	9	10	11	12	13	14
	*Signal Inputs Due End of Day					
15	16	17	18	19	20	21
			*AI for Job Hunting →Page 3			
22	23	24	25	26	27	28
		*Sys. Eng. Models →Page 4				*PES/IAS ExCom →Page 7
29	30					

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